

Appendix to Annex IV, Chapter 1:
Understanding on the Joint Enhancement of Transboundary River Sockeye Stocks

Pursuant to Annex IV of the Pacific Salmon Treaty, and recognizing the desire of Canada and the United States to continue a joint enhancement program for the transboundary rivers that is carefully planned and co-ordinated:

1. The Parties agree:
 - (a) to continue to develop strategies for management of the enhanced stocks prior to the return of adult fish;
 - (b) to continue to develop an agreed process for conducting periodic review of implemented projects to identify and recommend action regarding, *inter alia*:
 - (i) success or failure of a project in a given year or series of years;
 - (ii) a distribution of benefits that is substantially different than expected; and
 - (iii) costs which are substantially greater than expected; and
 - (c) to recommend a plan, when required, for funding of projects including:
 - (i) cost sharing arrangements between the Parties; and
 - (ii) long term funding obligations.
2. The Parties agree to maintain an Enhancement Subcommittee of the joint Transboundary Technical Committee whose Terms of Reference shall be, *inter alia*, to:
 - (a) develop preliminary summaries of various projects which meet the enhancement goals established by the Transboundary Panel;
 - (b) develop detailed feasibility studies for projects selected by the Transboundary Panel, including:
 - (i) estimation of costs and benefits;
 - (ii) likelihood of success;
 - (iii) schedules for implementation;
 - (iv) procedures for evaluation; and

(v) fisheries management plans for the enhanced stocks; and

(c) monitor implementation of projects and report progress to the Transboundary Panel.

3. Project Selection:

(a) General Guidelines:

(i) If broodstock is not available to provide the agreed number of eggs, up to 30% of the available adults will be taken, provided that a minimum of 600,000 eggs are available; if this minimum number is not available, no eggs will be taken;

(ii) A reasonable expectation that a stock identification technique will be available to estimate the contribution of enhanced sockeye in mixed stock fisheries is required in order for these projects to proceed. The appropriate stock identification technique for each fishery will be determined by the joint Transboundary Technical Committee.

(b) Stikine River:

For the duration of this Chapter, the eggtake goal for the Stikine sockeye enhancement program will be six million eggs. The Tahltan Lake sockeye salmon stock will be used as the source of eggs. Eggs will be incubated at the Port Snettisham central incubation facility (CIF). Fry will be planted into Tahltan and Tuya Lakes in the following manner, subject to review by the joint Transboundary Technical Committee:

a. When the sockeye escapement through the Tahltan Lake weir is less than 15,000 fish or an agreed alternate threshold, all fry will be returned to Tahltan Lake;

b. When the sockeye escapement through the Tahltan Lake weir is greater than 15,000 fish or an agreed alternate threshold, the fry will be distributed to Tahltan and Tuya Lakes in a manner which maximizes harvestable production and provides information on the potential production capacity of Tuya Lake.

(c) Taku River:

For the duration of this Chapter, the eggtake goal for the Taku sockeye enhancement program will be five million eggs. The Tatsamenie Lake salmon stock will be used as the source of eggs. Eggs will be incubated at the Port Snettisham central incubation facility (CIF). Fry will be planted into Tatsamenie Lake.

4. Harvest principles and cost sharing:

- (a) The Parties desire to maximize the harvest of enhanced sockeye salmon in their existing fisheries while considering the conservation needs of wild salmon runs. To avoid impacts on co-migrating stocks and species, exploitation rates applied to Taku and Stikine river sockeye salmon in existing mixed stock fisheries in Canada and the United States shall be at levels compatible with the maintenance of wild stocks.
- (b) Harvest sharing arrangements for enhanced stocks will be determined prior to the time eggs are taken to initiate production level enhancement.

5. Cost sharing:

- (a) In carrying out joint enhancement projects, capital construction and on-site operating costs shall be borne by the country on whose soil the project components are located.
- (b) The costs of producing Stikine River enhanced sockeye salmon shall be shared as follows:

(i) To be paid by Canada:

- a. Egg take;
- b. Egg transport;
- c. Smolt sampling;
- d. Sampling and numerical analysis necessary to determine the contribution of enhanced transboundary river sockeye salmon to Canadian fisheries; and
- e. Limnology sampling and hydroacoustics.

(ii) To be paid by the United States:

- a. Construction and operation of that portion of the Port Snettisham CIF that is dedicated to enhancement projects on the transboundary rivers.
- b. Transport of fry to enhancement site; and
- c. Sampling and analysis necessary to determine the contribution of enhanced transboundary river sockeye salmon to United States fisheries.

(iii) Projects to be conducted jointly:

- a. Disease sampling and analysis.

(c) The costs of producing Taku River enhanced sockeye salmon shall be shared as follows:

(i) To be paid by Canada:

- a. Egg take;
- b. Egg transport;
- c. Smolt sampling;
- d. Sampling and numerical analysis necessary to determine the contribution of enhanced Taku River sockeye stocks to Canadian fisheries;
- e. Limnology sampling and hydroacoustics; and
- f. Investigations to determine the feasibility of using sockeye from terminal areas, surplus to brood stock and spawning requirements in enhanced systems, for cost recovery.

(ii) To be paid by the United States:

- a. Construction and operation of that portion of the Port Snettisham CIF that is dedicated to enhancement projects on the transboundary rivers;
- b. Transport of fry to the enhancement site;
- c. Sampling and analysis necessary to determine the contribution of enhanced transboundary river sockeye salmon to United States fisheries; and

- d. Processing of sockeye otolith samples collected in the Taku River.

(iii) Projects to be conducted jointly:

- a. Disease sampling and analysis; and
- b. Identification and evaluation of alternative sockeye salmon enhancement opportunities in the Taku River.

Chapter 4: Fraser River Sockeye and Pink Salmon

1. The provisions of this Chapter shall apply for the period 2005 through 2010.
2. The U.S. share of the annual Fraser River sockeye and pink salmon Total Allowable Catch (the "TAC"), as defined in paragraph 3 to be harvested in the waters of Washington State is as follows:
 - (a) for sockeye salmon, the U.S. catch in the Fraser Panel Area shall not exceed 16.5 percent of the TAC;
 - (b) for pink salmon, the U.S. catch in the Fraser Panel Area shall not exceed 25.7 percent of the TAC.
3. For the purpose of this Chapter, the TAC shall be defined as the remaining portion of the annual aggregate Fraser River sockeye and pink runs (including any catch of Fraser River sockeye identified in Alaskan waters) after the spawning escapement targets established, unless otherwise agreed, by application of Canada's pre-season escapement plan (subject to any adjustments made pursuant to paragraph 3(b), below), the agreed Fraser River Aboriginal Exemption, and the catch in Panel authorized test fisheries have been deducted. TAC shall be computed separately for Fraser River sockeye and pink salmon. The following definitions and procedures apply to TAC calculations:
 - (a) The annual U.S. share shall be computed based on the inseason run size estimates in effect at the time the Panel relinquishes control of the U.S. Panel waters, using the escapement targets established by application of Canada's preseason escapement plan as may be adjusted pursuant to paragraph 3(b), below, and taking into account any adjustments as provided in paragraph 8, below.
 - (b) For the purposes of in-season management by the Fraser River Panel, the spawning escapement objective is the target set by Canada, including any extra requirements that may be identified and agreed to by the Fraser River Panel, for natural, environmental, or stock assessment factors, to ensure the fish reach the spawning grounds at target levels. In the event the Fraser River Panel does not agree to additional escapement amounts, the PSC staff will make a recommendation which shall become effective upon agreement by at least one national section of the Panel. Any additional escapement amounts believed necessary by Canada above those determined pursuant to the foregoing will not affect the U.S. share.
 - (c) The agreed Fraser River Aboriginal Fishery Exemption (AFE) is that number of sockeye which is subtracted from the total run size in determining the TAC upon which the U.S. shares specified in paragraph 2 are calculated. Any Canadian harvests in excess of these amounts count against the TAC, and do not affect the U.S. share. The agreed Fraser River Aboriginal Fishery Exemption is the actual catch of Fraser River sockeye harvested in both the in-river and marine area Aboriginal Fisheries, up to 400,000 sockeye annually.

- (d) For computing TAC by stock management groupings, the AFE shall be allocated to management groups as follows: The Early Stuart sockeye exemption shall be up to 20% of the Fraser River Aboriginal Fishery Exemption (AFE), and the remaining balance of the latter exemption shall be based on the average proportional distribution for the most recent three cycles and modified annually as required to address concerns for Fraser River sockeye stocks and other species and as otherwise agreed by the Fraser River Panel. For the duration of this Chapter, the harvest distribution of Early Stuart sockeye is expected to remain similar to that of recent years.
 - (e) To the extent practicable, the Fraser River Panel shall manage the United States fishery to spread the United States harvest proportionately to the TACs across all Fraser River sockeye stock management groupings (Early Stuart, Early Summer, Mid-Summer, and Late Run).
4. Pursuant to Article IV, paragraph 3, Canada shall annually establish the Fraser River sockeye and pink salmon spawning escapement targets for the purpose of calculating the annual TAC. For the purposes of pre-season planning, where possible, Canada shall provide forecasts of run size and spawning escapement requirements by stock management groupings to the Fraser River Panel no later than the annual meeting of the Commission. Forecasts of migration patterns, gross escapement needs, and any in-season adjustments in escapement requirements shall be provided to the Fraser River Panel by Canada as they become available in order to accommodate the management needs of the Panel in a timely manner. In addition, on a timely basis, the United States shall provide forecasts of sockeye and pink salmon run size returns affected by Panel management.
 5. The Fraser River Panel will develop fishing plans and in-season decision rules as may be necessary to implement the intent of this Chapter. The Parties shall establish and maintain data sharing principles and processes which ensure that the Parties, the Commission, and the Fraser River Panel are able to manage their fisheries in a timely manner consistent with this Chapter. With respect to management responsibilities, all activities of the Parties and the Fraser River Panel shall be consistent with the August 13, 1985, Memorandum of Understanding between the Parties.
 6. Fraser River Panel pre-season planning meetings that do not occur simultaneously with Commission meetings shall be held alternately in Canada and the United States. Scheduled in-season management meetings shall be held at Richmond, B.C. unless the Panel agrees otherwise. As agreed, Panel meetings may be held by telephone conference call.
 7. The Parties may agree to adjust the definition of the Fraser Panel Area as necessary to simplify domestic fishery management and ensure adequate consideration of the effect on other stocks and species harvested in the Area.
 8. Annually, the U.S. share shall be adjusted for harvest overages and underages in accordance with annual guidance provided by the Commission.

9. The Parties shall establish a Technical Committee for the Fraser River Panel:

- (a) the members shall coordinate the technical aspects of Fraser River Panel activities with and between the Commission staff and the national sections of the Fraser River Panel, and shall report, unless otherwise agreed, to their respective National Sections of the Panel. The Committee may receive assignments of a technical nature from the Fraser River Panel and will report results directly to the Panel.
- (b) membership of the Technical Committee shall consist of up to five such technical representatives as may be designated by each National Section of the Commission.
- (c) members of the Technical Committee shall analyze proposed management regimes, provide technical assistance in the development of proposals for management plans, explain technical reports and provide information and technical advice to their respective National Sections of the Panel.
- (d) the Technical Committee shall work with the Commission staff during pre-season development of the fishery regime and management plan and during in-season consideration of regulatory options for the sockeye and pink salmon fisheries of Fraser Panel Area waters and during post-season evaluations of the season to ensure that:
 - (i) domestic allocation objectives of both Parties are given full consideration;
 - (ii) conservation requirements and management objectives of the Parties for species and stocks other than Fraser River sockeye and pink salmon in the Fraser Panel Area during periods of Panel regulatory control are given full consideration; and
 - (iii) the Commission staff is informed in a timely manner of management actions being taken by the Parties in fisheries outside of the Fraser Panel Area that may harvest sockeye and pink salmon of Fraser River origin.
- (e) the staff of the Commission shall consult regularly in-season with the Technical Committee to ensure that its members are fully informed in a timely manner on the status of Fraser River sockeye and pink salmon stocks, and the expectations of abundance, migration routes and proposed regulatory options, so the members of the Technical Committee can brief their respective National Sections prior to each in-season Panel meeting.

10. The Parties agree that Panel management actions should meet the following objectives, listed in order of priority:

- (a) obtain spawning escapement goals by stock or stock grouping;
- (b) meet Treaty defined international allocation; and

(c) achieve domestic objectives.

11. The Fraser River Panel shall manage its fisheries consistent with the provisions of the other chapters of Annex IV to ensure that the conservation needs and management requirements for other salmon species and other sockeye and pink salmon stocks are taken into account.
12. The Parties agree to develop regulations to give effect to the provisions of the preceding paragraphs. Upon approval of the pre-season plan and during the period of Panel regulatory control, all sockeye and pink fisheries under the Panel's jurisdiction are closed unless opened for fishing by in-season order of the Panel.
13. Pursuant to the Parties' obligations under Article VI the Panel will use the following in-season decision process:
 - (a) The mid-point forecast provided by Canada will be used for management purposes until in-season updates of run size become available. Based upon advice from the Fraser River Panel Technical Committee and PSC staff, the Panel may adopt a more precautionary or optimistic applications of the forecast information until in-season updates of run size are available. PSC staff will provide the Fraser River Panel with recommendations for in-season run size and other factors relevant to sound fisheries management decisions. Based on information such as, but not limited to, in-season estimates of run timing and diversion rate, the PSC staff will make recommendations to the Fraser River Panel regarding in-season decision making.
 - (b) PSC staff will provide the Fraser River Panel with projected harvestable surpluses and status of harvest from fisheries under Panel management. These projections will incorporate any Fraser River Panel agreement on management adjustments that deal with environmental conditions during in-river migration that could significantly impact the Fraser River Panel's ability to achieve spawning escapement objectives and other considerations agreed to by the Panel.
 - (c) Any changes from PSC staff recommendations for points 13(a) and 13(b) above shall be based on bilateral agreement between the National Sections of the Fraser Panel. Acceptance of the PSC staff recommendation requires approval of at least one of the National Sections.
 - (d) The respective National Sections of the Panel will develop proposed regulations for their domestic Panel Water fisheries consistent with recommendations and projections provided by the PSC staff as described in 13(a) and 13(b) as may be modified pursuant to 13(c). Either National Section may ask PSC staff for advice in designing its fisheries proposals. PSC staff will assess and provide advice as to whether proposed fishery regulations for Panel Water fisheries are consistent with recommendations and projections described in 13(a) and 13(b) and Panel objectives. Subsequently, after full discussion of a Panel water fishery proposal, the following may occur: (i) the Panel may adopt the proposal based on bilateral agreement or; (ii) the proposing National Section may modify and re-submit its proposal in response to advice from staff and/or concern(s) raised by the other National Section; or (iii) while acknowledging objection(s) of the other National Section, the Panel will grant the

request to adopt the fishery proposal . In the event that the Panel adopts a fishery under the provisions of the latter circumstance (13(d)(iii)), prior to the commencement of the proposed fishery, the proposing National Section must provide a written rationale for the fishery as submitted.

- (e) If post-season a party maintains that it has been adversely affected by a fishery they objected to pursuant to paragraph 13(d)(iii) above or paragraph 13 (f) below; the PSC staff will prepare an objective report on the circumstances of the fishery and its consequences for the January PSC meeting following the season in question. The Panel will review the staff report and determine what action is required. If the Panel cannot come to agreement on the appropriate action, the issue will be referred to the Commission for resolution during its February annual meeting.
- (f) Pursuant with Article VI, paragraph 7 of the treaty, the Parties will communicate and consult with one another in a timely manner regarding their fishing plans for Fraser River sockeye outside of the Panel's regulatory control. In the event that a party has an objection to the other party's fishing plans as they relate to achievement of Panel objective, the implementing party will provide the rational for such plans.